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<110> SANTI, DANIEL V.  
REID, RALPH C.  
KODUMAL, SARAH J.  
JAYARAJ, SEBASTIAN

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| gaaactctgt  | cgggctttcc  | tactgaccgt  | ggctgggacc  | tggcacgtct  | gcaccacccg  | 240  |
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| gagcctgatc  | cagatgcgcg  | tttaggcggt  | atgttagctg | cggcgggcca | ttttgatgca  | 300  |
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<220>

<223> Synthetic construct

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| ggcattgggt | gccgttttcc aggcgggtgcg gggactccgg aagctttttg ggagctgctg 180 |
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| ggtacgtttc  | agggggattc  | cagcatgttg  | gaactcgatg  | cccatcgctt  | caaagagtgg  | 10500 |

|            |            |             |             |            |             |       |
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| atgtatccga | aagttttggg | tgcttggaa   | ttgcacgccc  | tgacacgtga | ccgtagctta  | 10560 |
| gattttttcg | tcctgtatag | cagcgggtaca | tctttactgg  | gccttccggg | tcaaggtagc  | 10620 |
| cgcgcgcgag | gggatgcctt | cttagatgcg  | attgcacatc  | atcgctgtcg | cctaggtctt  | 10680 |
| accgcgatgt | caattaattg | gggcctgctt  | agtgaagcca  | gcagtccggc | cacgccaaac  | 10740 |
| gatggtggtg | cgcgtctcca | gtaccgtggg  | atggaagggc  | ttaccttgga | gcaaggtgcg  | 10800 |
| gaagctctgg | gtcgtttact | tgcgcaacca  | cgcgcgcgag  | tgggggttat | gcgcctgaat  | 10860 |
| ctccgccagt | ggctggagtt | ctacccgaat  | gcggcacgcc  | tggcattatg | ggcggaaactg | 10920 |
| ctgaaagaac | gtgatcgcac | cgatcgcagt  | gcaagtaacg  | ctagtaacct | gcgggaagcg  | 10980 |
| cttcaatccg | cccgcccggg | ggatcggcag  | ctggttctcg  | aaaaacacct | gtcagaactg  | 11040 |
| ctgggccgtg | gtctccgtct | gccaccagaa  | cggattgaac  | gtcatgtccc | ttttagcaac  | 11100 |
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| aaaagctttg | aaaacgacgc | cgcagattta  | gaagccttgc  | gtgggatgac | tgatgaacag  | 11340 |
| aaagatgcgc | tgcttgcgga | gaaactcgca  | caactggccc  | agatcgtggg | cgaagggaat  | 11400 |
| tc         |            |             |             |            |             | 11402 |

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<211> 7325

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 11

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| aagaagaacg | caagtttaga  | gcaggaacgc  | actgaaccaa  | ttgcgattat  | tgggatcggc  | 120  |
| tgccgttttc | cgggtggtgc  | ggacaccccg  | gaagcgtttt  | gggaactggt  | ggatagtggc  | 180  |
| cgcgatgctg | tgacgcgct   | ggatcgccgt  | tgggcgctgg  | tgggcgtoca  | tccttcagaa  | 240  |
| gaagtccgc  | gctgggcggg  | gttgctgacc  | gaggcgcgtg  | atgggtttga  | cgcggcgctt  | 300  |
| tttggtacaa | gtccgcgcga  | agcgcgtagc  | ctcgatccgc  | aacagcgtct  | gtccttgag   | 360  |
| gtaacctggg | aaggtctgga  | agatgccggc  | atcgacccgc  | aatcgctgga  | tggtagccgt  | 420  |
| acaggcgtct | ttcttggggc  | ttgtagctcc  | gactatagcc  | atactgttgc  | gcagcagcgc  | 480  |
| cgcgaagaac | aggacgccta  | tgacattacg  | ggcaacactc  | ttccgctcgc  | tgccgggctg  | 540  |
| ctcagctata | ccctcgggtct | acagggcccg  | tgccctaccg  | tagacactgc  | gtgtagctca  | 600  |
| tcgttggtgg | caattcacct  | ggcgtgtcgc  | agcctccgcg  | cacgcgagtc  | tgatctggcc  | 660  |
| ctggctggcg | gtgttaatat  | gctgctgtca  | agcaaaaoca  | tgatcatgct  | cggctcgatt  | 720  |
| caagcactga | gcccggatgg  | acattgccgt  | acctttgatg  | cgtccgctaa  | tggcttcgta  | 780  |
| cgcggcgaag | gctgcgggat  | ggtggtatta  | aaacgtctga  | gcgatgccca  | gcggcacggc  | 840  |
| gatcgcatth | gggcattgat  | ccgcggttca  | gccatgaacc  | aggacggccg  | ttccaccggg  | 900  |
| ttgatggcgc | caaacgtcct  | cgcgccaggaa | gcgctgctgc  | gtcaggcgct  | acagagcgca  | 960  |
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| gcgggtctga | tcaaagccgc  | actggcgctt  | caccacgaaa  | gcattcctcg  | taatctgcat  | 1200 |
| ttccacacac | tcaatccgcg  | tattcgtatt  | gagggaaaccg | cgtggccct   | ggcaaccgaa  | 1260 |
| ccagttccgt | ggcctcgcgc  | gggtcgtcca  | cgctttgcgg  | gtgtgtctgc  | tttcggcctg  | 1320 |
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| acgccgggcc | gttctgctga  | actgcttgtt  | ttaagcgcta  | aatccacagc  | cgtctctggac | 1440 |
| gcacaggcgg | cgcggttatc  | ggcccacatc  | gcggcatatc  | cggagcaagg  | tctgggtgat  | 1500 |
| gtggcctttt | ccttagttgc  | gacccgcagt  | ccgatggaac  | atcgtctcgc  | cgttgccgcc  | 1560 |
| acgtctcgcg | aagcgtgcg   | ttctgcgtta  | gaggcggcgg  | cacagggccca | aacccccggca | 1620 |
| ggcgcggctc | gtggtcgtgc  | ggcctcgtca  | ccgggtaaat  | tggcatttct  | gttcgctggc  | 1680 |
| cagggcgccc | aagtaccagg  | tatgggccgt  | ggtctgtggg  | aagcctggcc  | tgctgttctg  | 1740 |

|             |             |             |             |             |             |      |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
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| gttatgtggg  | cggaaaccggg | tagtagccgt  | tcgtcgcttt  | tagaccaaac  | ggcggttcacc | 1860 |
| caaccagcgc  | tgttcgcgct  | tgaatacgcg  | ctggctgcgc  | tgtttagatc  | ttggggcgctg | 1920 |
| gaaccggaac  | tgatcgcggg  | ccattctttg  | ggcgagctgg  | tggccgcgctg | cgttgcgggc  | 1980 |
| gtgttttcgc  | tggaagacgc  | tgttcgcttg  | gtggtggcac  | gcggggcgct  | gatgcaggcg  | 2040 |
| ctgccagctg  | gcggtgccat  | ggttagcatt  | gccgctccgg  | aagccgatgt  | cgccgcagct  | 2100 |
| gttgcaaccgc | acgcggctag  | tgtctcaatc  | gccgcgctca  | atggccctga  | gcaggttgtc  | 2160 |
| attgctggcg  | cggagaaatt  | tgtgcaacaa  | attgccgctg  | cctttgctgc  | gcgcggtgct  | 2220 |
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| gaagcatttc  | gccgcgtcac  | tgaatctgtg  | acctatcgcc  | gcccgtcgat  | ggcggttagta | 2340 |
| agcaatctgt  | cgggtaaacc  | gtgtaccgat  | gaggtgtgtg  | cgcttggtta  | ttgggtacgc  | 2400 |
| catgctcggg  | aagcggtgcg  | cttcgcagat  | ggcggttaaag | cgctgcacgc  | agcaggcgcg  | 2460 |
| ggtatttttg  | ttgaagtgg   | tcgaaacct   | gccctgctgg  | gtctgctgcc  | tgcattgtctg | 2520 |
| ccggtatccc  | gtccagtgtt  | actgccagca  | agccgcgcag  | gtcgtgacga  | ggccgcgtca  | 2580 |
| gcattagaag  | cactgggtgg  | gttttggttg  | gttgggtggca | gcgtaacgtg  | gagtgggtgtg | 2640 |
| ttcccgctcag | gtggtgcgcg  | tggtcctctc  | ccaacgtatc  | cgtggcaacg  | ggaacgggtat | 2700 |
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| catccattgc  | tgggtgaagc  | cttcagtgtg  | tcaaccacag  | caggtctgcg  | cctgtgggag  | 2820 |
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<220>
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<400> 12
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<210> 13
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<220>  
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<400> 13  
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<210> 14  
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<220>  
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<210> 15  
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<400> 16  
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<210> 17  
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<400> 17

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<210> 18  
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<400> 18  
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<210> 19  
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<400> 19  
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<210> 20  
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<221> VARIANT  
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<210> 23  
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<400> 23  
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<220>  
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<221> misc\_feature  
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 22, 23, 24, 25, 26, 32, 39, 40, 41, 42

<223> n = A,T,C or G

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<220>

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<221> misc\_feature

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<223> n = A,T,C or G

<400> 27

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<221> misc\_feature

<222> 1, 2, 3, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21,  
22, 23, 24, 25, 26

<223> n = A,T,C or G

<400> 28

nnnggtctcn nnnnnnnnnn nnnnnn

26

<210> 29

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic construct

<221> misc\_feature

<222> 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21,  
22, 29, 30, 31, 32, 33

<223> n = A,T,C or G

<400> 29

gatcgnnnnn nnnnnnnnnn nngtcttcnn nnn

33

<210> 30

<211> 59

<212> DNA

<213> Artificial Sequence



<220>

<223> Synthetic construct

<221> misc\_feature

<222> 1, 2, 3, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21,  
22, 23, 24, 25, 26, 32, 33, 34, 35, 36, 37, 38, 39, 40,  
41, 42, 43, 44, 45, 46, 47, 48, 55, 56, 57, 58, 59

<223> n = A,T,C or G

<400> 30

nnnggtctctn nnnnnnnnnn nnnnnngatc gnnnnnnnnn nnnnnnnngt cttnnnnn 59